```
Project Name: OPTION 1 TRACK
Description: option 1 track alignment
Horizontal Alignment Name: NB TRACK
                   Description:
                            Style: Default
                                                        STATION
                                                                           NORTHING
                                                                                                EASTING
Element: Linear
                                                2065+00.00
                  POB (
                                                                       1821155.60 6695173.86
            TS ( ) 2106+00.00
Tangent Direction: S 44^31'17" E
Tangent Length
                                                   2106+38.05
                                                                        1818205.21
                                                                                            6698075.36
                 Tangent Length:
                                                       4138.05
Element: Cosine

      2106+38.05
      1818205.21
      6698075.36

      2120+43.42
      1817203.20
      6699060.76

      2126+38.05
      1816764.51
      6699462.41

                   TS (
                  SPI (
                   SPI ( )
                                                   0.00
28016.50
               Entrance Radius:
                    Exit Radius:
                           Length:
Angle:
                                                      2000.00
                                                     2<sup>02</sup>'42" Right
                  Constant:
Long Tangent:
Short Tangent:
Long Chord:
                                                      7485.52
                                                      1405.36
                                                       594.79
                                                     1999.88
                                                      1999.77
                                  Ys:
                                                         21.23
                                   P:
                                                           3.38
                                   K:
                                                         999.98
            Tangent Direction: S 44^31'17" E
Radial Direction: S 45^28'43" W
Chord Direction: S 43^54'47" E
Radial Direction: S 47^31'26" W
Tangent Direction: S 42^28'34" E
Element: Circular
                                                   2126+38.05 1816764.51 6699462.41
2137+96.34 1815910.21 6700244.59
1797845.41 6678798.63
                   PI (
                                                   2137+96.34
                    CC (
                    CS (
                                                 2149+53.31
                                                                       1814994.25
                                                                                          6700953.57
                                                   28016.50
4^44'06" Right
                            Radius:
                             Delta:
                                                     0^12'16"
  Degree of Curvature (Arc):
                            Length:
                                                      2315.25
                                                       1158.29
                           Tangent:
                              Chord:
                                                        2314.60
               Middle Ordinate:
                                                           23.91
             23.93
Rangent Direction: S 42^28'34" E
Radial Direction: S 47^31'26" W
Chord Direction: S 40^06'32" E
Radial Direction: S 52^15'31" W
Rangent Direction: S 37^44'20"
                         External:
            Tangent Direction:
            Tangent Direction:
Element: Cosine
                                                  2149+53.31 1814994.25 6700953.57
2155+48.09 1814523.91 6701317.64
                   CS (
               SPI ( )
ST ( )
Entrance Radius:
                                                  2169+53.31
                                                                       1813382.58
                                                                                            6702137.65
                                                   28016.50
                     Exit Radius:
                                                     2000.00
                                                            0.00
                         Angle:
Constant:
Tanger+
                                                     2^02'42" Right
                                                      7485.52
                   Long Tangent:
                                                      1405.36
                  Short Tangent:
                                                        594.79
                                                      1999.88
                      Long Chord:
                                                       1999.77
                                  Xs:
                                  Ys:
                                                         21.23
                                   P:
                                                            3.38
                                   K:
                                                         999.98
                                        S 37<sup>44</sup>'29" E
S 52<sup>15</sup>'31" W
S 36<sup>18</sup>'16" E
S 54<sup>18</sup>'13" W
            Tangent Direction:
              Radial Direction:
               Chord Direction:
              Radial Direction:
            Tangent Direction:
                                             S 35<sup>41</sup>'47" E
Element: Linear
                                                   2169+53.31
                                                                       1813382.58
                                                                                            6702137.65
                    ST
                       (
                    TS
                                                    2280+12.91
                                                                        1804400.85
                                                                                            6708590.80
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Tangent Direction: S 35<sup>41'47"</sup> E Tangent Length: 11059.60
                            Cosine

TS ( ) 2280+12.91 1804400.85 6708590.80

SPI ( ) 2294+18.27 1803259.52 6709410.81

SC ( ) 2300+12.91 1802764.41 6709740.41

Entrance Radius: 0.00

Exit Radius: 28016.50

Length: 2000.00

Angle: 2^02'42" Right

Constant: 7485.52

Long Tangent: 1405.36

Short Tangent: 594.79

Long Chord: 1999.88

Xs: 1999.77

Ys: 21.23

P: 3.38

K: 999.98

Tangent Direction: S 35^41'47" E

Radial Direction: S 35^05'17" E

Radial Direction: S 56^20'56" W

Tangent Direction: S 33^39'04" E
Element: Cosine
Element: Circular
                                                                                                           2300+12.91 1802764.41 6709740.41
2347+76.58 1798799.00 6712380.13
1787239.46 6686418.74
2394+49.99 1794184.00 6713560.91
                                               SC (
                                               PI (
    CC ( )
CS ( )
Radius:
Delta:
Degree of Curvature(Arc):
                                                                                                                       28010.30
19^17'58" Right
0^12'16"
9437.08
                                                                                                                               28016.50
                                                                 Length:
                             Length: 9437.08
Tangent: 4763.67
Chord: 9392.53
Middle Ordinate: 396.41
External: 402.10
Tangent Direction: S 33^39'04" E
Radial Direction: S 56^20'56" W
Chord Direction: S 24^00'05" E
Radial Direction: S 75^38'54" W
Tangent Direction: S 14^21'06" E
                            Cosine

CS ( ) 2394+49.99 1794184.00 6713560.91

SPI ( ) 2400+44.78 1793607.77 6713708.34

ST ( ) 2414+49.99 1792234.71 6714007.89

Entrance Radius: 0.00

Length: 2000.00

Angle: 2^02'42" Right

Constant: 7485.52

Long Tangent: 1405.36

Short Tangent: 594.79

Long Chord: 1999.88

Xs: 1999.77

Ys: 21.23

P: 3.38

K: 999.98

Tangent Direction: S 14^21'06" E

Radial Direction: S 75^38'54" W

Chord Direction: S 12^54'53" E

Radial Direction: S 77^41'36" W

Tangent Direction: S 12^18'24" E
Element: Cosine
                             ST ( ) 2414+49.99
TS ( ) 2458+08.11
Tangent Direction: S 12^18'24" E
Tangent Length: 4358.12
Element: Linear
                                                                                                                                                                    1792234.71 6714007.89
1787976.74 6714936.79
Element: Cosine
                                    TS ( ) 2458+08.11 1787976.74 6714936.79
SPI ( ) 2472+13.47 1786603.67 6715236.33
SC ( ) 2478+08.11 1786027.45 6715383.78
Entrance Radius: 0.00
Exit Radius: 28000.00
Length: 2000.00
                                                                                                                          2000.00
                                                                    Length:
```

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2<sup>02</sup>'47" Left
                                          Angle:
                                                                             7483.31
                                    Constant:
                          Long Tangent:
Short Tangent:
Long Chord:
                                                                          1405.36
                                                                              594.79
                                                                           1999.88
                                                                             1999.77
                                                Ys:
                                                                                 21.24
                                                  P:
                                                                                    3.38
                                                  K:
                                                                                 999.98
                 R: 999.98
Tangent Direction: S 12^18'24" E
Radial Direction: S 77^41'36" W
Chord Direction: S 12^54'54" E
Radial Direction: S 75^38'50" W
Tangent Direction: S 14^21'10" E
Element: Circular
  SC ( )
PI ( )
CC ( )
CS ( )
Radius:
Delta:
Degree of Curvature(Arc):
Length:
Tangent:
Chord:
                                                                    2478+08.11 1786027.45 6715383.78
2509+94.46 1782940.55 6716173.65
1792968.47 6742509.82
2541+53.51 1780110.06 6717636.92
                                                                      28000.00
12^59'04" Left
0^12'17"
6345.40
3186 37
                                                                 2541+53.51
                                                                             3186.35
                                          Chord:
                                                                            6331.83
                     Middle Ordinate:
                                                                             179.56
                 External: 180.72
Tangent Direction: S 14^21'10" E
Radial Direction: S 75^38'50" W
Chord Direction: S 20^50'42" E
Radial Direction: S 62^39'45" W
Tangent Direction: S 27^20'15" E
                                   External:
                                                                                180.72
Element: Cosine
                     CS ( ) 2541+53.51 1780110.06 6717636.92
SPI ( ) 2547+48.30 1779581.70 6717910.06
ST ( ) 2561+53.51 1778357.13 6718599.61
Entrance Radius: 28000.00
Exit Radius: 0.00
Length: 2000.00
Angle: 2^02'47" Left
Constant: 7483.31
Long Tangent: 1405.36
Short Tangent: 594.79
Long Chord: 1999.88
Xs: 1999.77
                                                                          594.79
1999.88
1999.77
                                                Xs:
                                                Ys:
                                                                                21.24
                                                  P:
                                                                                     3.38
                 K: 999.98
Tangent Direction: S 27^20'15" E
Radial Direction: S 62^39'45" W
Chord Direction: S 28^46'31" E
Radial Direction: S 60^36'59" W
Tangent Direction: S 29^23'01" E
                 ST ( ) 2561+53.51 1778357.13 6718599.61
TS ( ) 2599+14.34 1775080.12 6720444.87
Tangent Direction: S 29^23'01" E
Tangent Length: 3760.82
Element: Linear
Element: Cosine
                                                                     2599+14.34 1775080.12 6720444.87
2613+19.70 1773855.56 6721134.42
                         TS ( )
SPI ( )
SC ( )
                     SC ( , Entrance Radius: Exit Radius:
                                                                                                1773348.04 6721444.58
                                                                      2619+14.34
                                                                                0.00
                                                                          28000.00
                         Length:
Angle:
Constant:
Long Tangent:
Short Tangent:
                                                                               2000.00
                                                                          2<sup>002</sup>'47" Left
                                                                              7483.31
                                                                            1405.36
                                                                               594.79
                                                                           1999.88
                                Long Chord:
                                                                            1999.77
                                                 Ys:
                                                                                21.24
                                                  P:
                                                                                   3.38
                                                                                 999.98
                                                  K:
                                                                  S 29<sup>23</sup>'01" E
                  Tangent Direction:
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Radial Direction:
                                                  S 60<sup>3</sup>6'59" W
                                                  S 29<sup>59</sup>'32" E
                Chord Direction:
             Radial Direction:
Tangent Direction:
                                                S 58<sup>34</sup>'12" W
                                                S 31<sup>25</sup>'48" E
Element: Circular
                                                       2619+14.34
                                                                           1773348.04
                     SC (
                                                                                                   6721444.58
                     PI (
                                                       2665+57.56
                                                                             1769386.08 6723865.81
                     CC (
                                                                             1787948.78 6745336.38
                     CS (
                                                       2711+17.03
                                                                             1766417.72
                                                                                                   6727436.29
                              Radius:
                                                          28000.00
                                                         18<sup>49</sup>'53" Left
                               Delta:
                                                         0^12'17"
  Degree of Curvature (Arc):
                              Length:
                                                          9202.70
                             Tangent:
                                                           4643.22
                               Chord:
                                                           9161.33
                Middle Ordinate:
                                                            377.23
             External: 382.38
Tangent Direction: S 31^25'48" E
Radial Direction: S 58^34'12" W
Chord Direction: S 40^50'44" E
Radial Direction: S 39^44'20" W
Tangent Direction: S 50^15'40" E
Element: Cosine

      2711+17.03
      1766417.72
      6727436.29

      2717+11.82
      1766037.48
      6727893.66

      2731+17.03
      1765178.20
      6729005.73

                     CS (
                   SPI (
                                        )
                     ST (
                                       )
                Entrance Radius:
                                                        28000.00
                      Exit Radius:
                                                                0.00
                                                          2000.00
                              Length:
                                                         2^02'47" Left
                               Angle:
                           Constant:
                                                           7483.31
                     Long Tangent:
                                                          1405.36
                    Short Tangent:
                                                            594.79
                        Long Chord:
                                                          1999.88
                                                          1999.77
                                    Xs:
                                     Ys:
                                                               21.24
                                      P:
                                                                3.38
             K: 999.98
Tangent Direction: S 50^15'40" E
Radial Direction: S 39^44'20" W
Chord Direction: S 51^41'56" E
Radial Direction: S 37^41'33" W
Tangent Direction: S 52^18'27" E
Element: Linear
             ST ( ) 2731+17.03

POE ( ) 2740+04.62

Tangent Direction: S 52^18'27" E

Tangent Length:
                                                                             1765178.20
                                                                                                 6729005.73
                                                                             1764635.51
                                                                                                   6729708.08
```